

8th Grade Lessons 93-94

- I can use correct order of operations when evaluating expressions using fraction bars as symbols of inclusion.
- I can add like terms.

ORDER OF OPERATIONS

1. Simplify within symbols of inclusion.
2. Simplify exponents and roots.
3. Multiply and divide in order from left to right.
4. Add and subtract in order from left to right.

$$4 - (3 - 7) + 3 \cdot 2 + 6$$

$$\begin{array}{r}
 4 - (-4) + 3 \cdot 2 + 6 \\
 \hline
 2(-5) \\
 \hline
 4 - (-4) + 6 + 6 \\
 \hline
 -10
 \end{array}
 \quad
 \begin{array}{r}
 2(-4 - 1) \\
 \hline
 20 \\
 -10 \\
 \hline
 -2
 \end{array}$$

$$\frac{6(-4 + 3) - (-2 - 6)(2)}{3(2 - 4)}$$

$$\frac{6(-1) - (-8)(2)}{3(-2)}$$

$$\frac{-6 - (-16)}{-6} \rightarrow -\frac{5}{3}$$

$$\frac{10}{-6}$$

like terms...variable components have the same value

$$x + 2y + 3x + 5 - 7y - 2$$

$$x + 3x + 2y - 7y + 5 - 2$$

$$4x - 5y + 3$$

Simplify by adding like terms:

$$-3x + 2y + 2x + 3 + 7$$

$$-3x + 2x + 2y + 3 + 7$$

$$-x + 2y + 10$$

$$3x + 2m - 14x + 2x - 4m + 4 - 2$$

$$3x - 14x + 2x + 2m - 4m + 4 - 2$$

$$-9x - 2m + 2$$

$$-4x + 7x + 4 - y - x - 8 + 4y$$

$$y + 3y - 4 + 10 - 6y + 2m - 6m$$

$$a + 3b - 6a + 4 - 10 + 7a - 2 + 8b$$

Assignment

Problem Set 94

***A/B Optional:** #1-2, 4, 6, 8-9, 10-13, 15-21, 26